## CLAIMS:

- 1. A method for ceramizing starting glass of glass-ceramics into glass-ceramics, comprising at least the following steps:
- 1.1 the starting glass is heated from an initial temperature T<sub>1</sub> to a temperature T<sub>2</sub> which is disposed above the glass transformation temperature T<sub>G</sub> at which crystallization nuclei are precipitated;
- 1.2 the glass is held at the temperature T<sub>2</sub> for a period t<sub>2</sub> for the precipitation of crystallization nuclei;
- 1.3 the glass is further heated to a temperature T<sub>3</sub> at which a crystal phase grows on the nuclei formed following step 1.1 and 1.2;
- 1.4 the glass is held for a period t<sub>3</sub> at a temperature T<sub>3</sub> or heated during this period to a higher temperature T<sub>4</sub> until the predetermined properties of the glass-ceramics have been reached;
- 1.5 the control of the temperature curve is performed with the help of a control loop comprising at least one temperature sensor for sensing the temperature and a heating unit as an actuator, wherein
- 1.6 the heating unit comprises IR radiators for heating the glass to be relaxed with a thermal dead time of less than 10 secs., especially < 5 secs.</p>
- 2. A method as claimed in claim 1, wherein the heating unit comprises IR radiators of a high color temperature.
- 3. A method as claimed in claim 2, wherein the IR radiators are short-wave IR radiators with a color temperature > 1,500°C, especially > 2,000°C, especially preferably > 2,400°C, even more preferably > 2,700°C.
- 4. A method as claimed in one of the claims 1 to 3, wherein the IR radiators of the heating unit comprise in a bordered space in a comprehensive manner reflective or backscattering boundary surfaces.
- 5. A method as claimed in claim 4, wherein the reflective or backscattering boundary surfaces comprise one or mixtures of several of the following materials: Al<sub>2</sub>O<sub>3</sub>; BaF<sub>2</sub>;BaTiO<sub>3</sub>;CaF<sub>2</sub>;CaTiO<sub>3</sub>;MgO · 3.5 Al<sub>2</sub>O<sub>3</sub>; MgO; SrF<sub>2</sub>; SiO<sub>2</sub>; SrTiO<sub>3</sub>; TiO<sub>2</sub>; quarzal; spinel; cordierite; cordierite sintered glass ceramics.
- 6. A method as claimed in one of the claims 4 or 5, wherein the bordered space is an IR radiation cavity.
- 7. A method as claimed in one of the claims 1 to 6, wherein the heating temperature to temperature  $T_2$  is less than 120 secs., preferably less than 90 secs., and the temperature  $T_2$  is less than 800°C.
- 8. A method as claimed in one of the claims 1 to 7, wherein the holding temperature  $t_2$  at temperature  $T_2$  is in the range of 60 secs. to 3,600 secs.
- 9. A method as claimed in one of the claims 1 to 8, wherein the heating time from temperature  $T_2$  to temperature  $T_3$  is less than 90 secs., preferably less than 60 secs., and the temperature  $T_3$  is higher than 700°C.

- 10. A method as claimed in one of the claims 1 to 9, characterized in that the holding temperature  $t_3$  at temperature  $T_3$  and the heating time  $t_3$  to temperature  $T_4$  is in the range of 60 secs. to 1,800 secs.
- 11. A method as claimed in one of the claims 1 to 10, wherein the starting glass to be ceramized is held on a non-liquid base.
- 12. An apparatus for ceramizing a green glass, comprising at least
- 12.1 a heating unit;
- 12.2 a temperature sensor;
- 12.3 a closed-loop/open-loop control device for controlling the heating unit depending on the detected temperature and a predetermined temperature program, wherein
- 12.4 the heating unit comprises IR radiators for heating the glass to be relaxed with a thermal dead time of less than 10 secs., especially less than 5 secs.
- 13. An apparatus as claimed in claim 12, wherein the heating unit comprises IR radiators of a high color temperature.
- 14. An apparatus as claimed in claim 13, wherein the IR radiators are short-wave IR radiators with a color temperature of more than 1,500°C, especially more than 2,000°C, particularly preferably more than 2,400°C, and even more preferably more than 2,700°C.
- 15. An apparatus as claimed in one of the claims 12 to 14, wherein the IR radiators of the heating unit comprise in a bordered space in a comprehensive manner reflective or backscattering boundary surfaces.
- 16. An apparatus as claimed in claim 15, wherein the reflective or backscattering boundary surfaces comprise one or mixtures of several of the following materials: Al<sub>2</sub>O<sub>3</sub>; BaF<sub>2</sub>;BaTiO<sub>3</sub>;CaF<sub>2</sub>;CaTiO<sub>3</sub>;MgO · 3.5 Al<sub>2</sub>O<sub>3</sub>; MgO; SrF<sub>2</sub>; SiO<sub>2</sub>; SrTiO<sub>3</sub>; TiO<sub>2</sub>; quarzal; spinel; cordierite; cordierite sintered glass ceramics.
- 17. An apparatus as claimed in one of the claims 15 or 16, wherein the bordered space is an IR radiation cavity.
- 18. An apparatus as claimed in one of the claims 12 to 17, wherein the apparatus comprises devices for storing the starting glass to be ceramized.